APPENDIX A: SURVEY

SALMON RECOVERY FUNDING BOARD

Evaluation of Completed Salmon Recovery Projects
Phone Interview Survey Instrument

June 29, 2003 – FINAL VERSION 1.4 (as fielded)

Survey Goals

- Evaluate overall project success to date
- Determine what monitoring methods are being used to evaluate projects

Survey Outline

A. Introduction & general background
B. Project overview
C. Monitoring of project results
D. Overall project feedback

Black text = general material, questions for all respondents

Red = Acquisition (A)
Green = Planning/Assessment (P)
Blue = Habitat/Capital (H)

A. Introduction & General Background

Hi, this is _____ from Taylor Associates/Cascadia Consulting, calling on behalf of the Salmon Recovery Funding Board. As you may know, we are conducting a survey of projects completed to date using SRF Board funding. This will take roughly 30 - 40 minutes to complete. Is this a good time for you?

Also, your responses to this survey will be kept anonymous; that is, they will be reported in aggregate form only with results from similar projects. No information will be provided to the SRF Board that would link your responses to you as an individual or to your specific project.

[For project managers with multiple project types:] Today I'm calling regarding _____ project; however, you may be contacted again to discuss other projects you manage.

A-1 For this study, I need to reach the project manager for the _____ project. Would that be you?

1- Yes
2- No (If NO, ask for appropriate person and/or set time to call back: _____)

A-2 [Verify key information from project database, such as Lead Entity and contact information.]

A-3 Was the project an acquisition, assessment, or capital habitat project?

1- Acquisition [If so, was it with or without projects?]
2- Assessment/planning study [If so, was it with or without projects?]
3- Capital/habitat restoration project
4- Other: (specify) _____

A-4 What was the project's primary type? [Check one only: prompt with category listed in database]

1- **In-stream passage** (culverts, bridges, fishways, logjams, dam removal)
2- **In-stream habitat** (channel reconfiguration, deflectors, log and rock control weirs, roughened channels, woody debris, channel connectivity, off-channel habitat, wetland restoration, spawning gravel)
3- **Riparian habitat** (riparian vegetation plantings, dike removal/setback, road abandonment, landfill removal, livestock exclusion)
4- **In-stream diversions** (fish screening, pipes, ditches, headgates, log and rock weirs)
5- **Upland habitat** (road decommissioning, no-till program, other upland sediment control)
6- **Estuarine/marine nearshore** (beach nourishment, bulkhead removal, dike breaching/removal, eel grass bed reestablishment, kelp forest reestablishment, landfill removal, plant removal/control, riparian plant installation, shoreline restoration, tidal channel reconstruction, tide gate removal)
7- Other: [specify] _____

A-5 Which target species was your project designed to help? [check all that apply]

1- Chinook salmon (*Oncorhynchus tshawytscha*)
2- Coho (*O. kisutch*)
3- Chum salmon (*O. keta*)
4- Pink salmon (*O. gorbuscha*)
5- Sockeye salmon (*O. nerka*)
6- Steelhead trout (*O. mykiss*)
7- Coastal cutthroat trout (*O. clarki*)
8- Bull trout (*Salvelinus confluentus*)
9- Other: [specify] _____

A-6 What was the source of your matching funds?

1- In-kind contributions
2- Federal funds
3- Other state funds
4- Local funds (city/county)
5- Private non-profit/foundation
6- Other: [specify] _____

B. Project Overview

B-1 **In a few keywords, what were the original project objectives?** [25 words or less]

B-2 **What actually occurred?** [25 words or less]

B-3 **Clarify any key differences from the original proposal.** [Comment field: Probe to determine whether the expected objectives and benefits noted on a project application actually occurred. For example, if the sponsor expected to open two miles of stream by installing the project, did that actually happen?]

B-4 **Was the project completed within the original proposed timeframe and budget?**

1- Yes
2- No: (specify) __ Time change __ Budget change [check all that apply]
3- Don't know

B-5 **[If NO in B-4] Please briefly explain why the project did not meet its proposed schedule and/or budget.**

*For **Acquisition** projects*
1- Seller-related reasons
2- Buyer-related reasons
3- Matching funds
4- Other: (specify) _____

*For **Planning/Assessment** projects*
1- Staffing
2- Data availability
3- Scoping
4- Site access
5- Other: (specify) _____

*For **Habitat** projects*
1- Permitting
2- Seasonal window for activity
3- Staffing
4- Matching funds
5- Other: (specify) _____

B-6 **Approximately how much habitat (acreage, stream length) did the project protect, restore, or assess?** (e.g., miles of stream restored, miles of riparian planted, acres acquired – if details not known, try to get ballpark information regarding scale)

For **Acquisition** Projects Only (**A**)

B-A1 What was the purpose of the acquisition?

1- Preservation
2- Capital project on site
3- Habitat access
4- Refuge/refugia
5- Don't know
6- Other: (specify) _____

B-A2 Was the acquisition based on an assessment?

1- Yes
2- No
3- Don't know

B-A3 [If YES in B-A2] What type of assessment?

1- Buying opportunities (e.g., landowner willingness to sell)
2- Habitat assessment/limiting factors analysis (e.g., watershed analysis, refugia study, habitat mapping)
3- Modeling assessment [If so, what type?]
4- Other: (specify) _____
5- Don't know

B-A4 [If YES in B-A2] Did the assessment include prioritized actions for the watershed?

1- Yes
2- No
3- Don't know

B-A5 Are any capital or O&M (operations and maintenance) projects planned or underway for the site?

1- Yes
2- No
3- Don't know

B-A6 [If YES in B-A4] What type of project(s) are planned or underway? [check all applicable and enter number of projects]

1- In-stream passage [enter number: _____]
2- In-stream habitat [enter number: _____]
3- Riparian habitat [enter number: _____]
4- In-stream diversions [enter number: _____]
5- Upland habitat [enter number: _____]
6- Estuarine/marine nearshore [enter number: _____]
7- Other: (specify) _____
8- Don't know

B-A7 [If YES in B-A4] Who is responsible for implementing the project(s)?

1- Project manager
2- State agency
3- Federal agency
4- Tribe
5- Private sector/consultants
6- Volunteers
7- Other: (specify) _____
8- Don't know

B-A8 [If YES in B-A4] What is the current status of the project(s)?

1- Planned [enter number: _____]
2- In progress [enter number: _____]
3- Completed [enter number: _____]
4- Ongoing maintenance [enter number: _____]
5- Don't know

For **Planning/Assessments** Only (**P**)

B-P1 Did the assessment cover the watershed as a whole or did it focus on specific sites or projects?

1- Overall watershed assessment
2- Site-specific or project-specific assessment
Comments: _____

B-P2 What were the primary goals of the assessment? [prompt if needed]

1- Acquisition
2- Feasibility/design
3- Capital project identification and prioritization
4- Increase knowledge base (baseline monitoring)
5- Identify watershed/physical process affecting restoration
6- Other: (specify) _____

B-P3 Was a report completed?

1- Yes [If YES, it is available to the public?]
2- No

B-P4 Did the assessment lead to identification of specific projects?

1- Yes
2- No [If NO, do you know why not?]

B-P5 [If YES in B-P4] List numbers of projects by type.

1- Acquisition [Enter number: _____]
2- In-stream passage [Enter number: _____]
3- In-stream habitat [Enter number: _____]
4- Riparian habitat [Enter number: _____]
5- In-stream diversions [Enter number: _____]
6- Upland habitat [Enter number: _____]
7- Estuarine/marine nearshore [Enter number: _____]
8- Other: (specify) _____

B-P6 [If YES in B-P4] Did the assessment identify project feasibility, expected costs, and next steps for implementation?

1- Yes
2- No

B-P7 [If YES in B-P4] How many projects have reached the following steps?

1- Completed 100% design [enter number: _____]
2- Funding applications submitted [enter number: _____]
3- Had funding awarded [enter number: _____]
4- Begun implementation [enter number: _____]
5- Been completed [enter number: _____]

For **Habitat** Projects Only (**H**)

B-H1 Was the project based on an assessment?

1- Yes [If YES, did the assessment include prioritized actions for the watershed?]
2- No

B-H2 Who planned and designed the project?

1- You
2- Your staff
3- Other agency
4- Consultant
5- Other: [specify] _____

B-H3 Who implemented the project (e.g., construction, plantings)?

1- You
2- Your staff
3- Other agency
4- Consultant
5- Other: [specify] _____

B-H4 Were additional funds needed for operation and maintenance (O&M) after the project was completed?

1- Yes: (specify source and amount, if possible) _____
2- No
3- Don't know

B-H5 Did this project lead to other projects in the watershed?

1- Yes
2- No
3- Don't know

B-H6 [If YES in B-H5] What type(s) of other projects did the project lead to?

1- In-stream passage
2- In-stream habitat
3- Riparian habitat
4- In-stream diversions
5- Upland habitat
6- Estuarine/marine nearshore
7- Other: [specify] _____
8- Don't know

C. Monitoring of Project Results

For **Planning/Assessments** Only

C-P1 In a few keywords, how is success measured? (e.g., miles of stream, barriers, or landowners surveyed) [Now SKIP TO SECTION D]

For **Acquisition (A)** and **Habitat (H)** Projects Only

C-1 Has any monitoring of the project been conducted to date?

1- Yes
2- No [If NO, why not?]
3- Don't know

C-2 Did the original proposal include provisions for monitoring?

1- Yes [If YES, what was planned for monitoring?]
2- No [If NO, why not? If NO to both C-1 and C-2, then **skip to Habitat subsection for project type, C-H#**]
3- Don't know

C-3 Has a monitoring plan been written?

1- Yes [If YES, who prepared the plan?]
2- No
3- Don't know

C-4 Has a monitoring plan been submitted to IAC/SRFB?

1- Yes
2- No
3- Don't know

C-5 Who is assigned responsibility for completing the monitoring?

1- You
2- Your staff
3- Other agency
4- Consultant/Contractor
5- Other: [specify] _____
6- Don't know

C-6 Who conducted the monitoring?

1- You
2- Your staff
3- Other agency
4- Consultant/Contractor
5- Volunteers [If so, who compiles and stores the information?]
6- Other: [specify] _____
7- Don't know

C-7 How much is the monitoring estimated to cost?

C-8 How much has been allocated for monitoring to date?

C-9 Were additional funds needed for monitoring the project?

C-10 Who is paying for the monitoring (SRFB and other sources)?

C-11 Have any monitoring results been reported?

1- Yes [If YES, to whom? Did you provide a written monitoring report? How are the results used?]
2- No
3- Don't know

C-12 Which basic monitoring protocol did you use?

1- Temporal (before-after)
2- Spatial (control-treatment/impact)
3- Characterization/description
4- Other: (specify) _____
5- Don't know

C-13 What monitoring methods are being used to evaluate the project?

1- Fish/redd sampling
2- Macroinvertebrate sampling
3- Habitat characterization
4- Water quality
5- Riparian/vegetative surveys
6- Other: (specify) _____
7- Don't know

C-14 Did you follow published protocols or standardized monitoring strategies?

1- Yes [If YES, which one(s)?]
2- No
3- Don't know

C-15 What indicators and metrics are being used to evaluate the project's success?

1- Fish species/density/age class structure
2- Reduction in erosion rate/sediment delivery
3- Increased volume of gravel/cobble stored/trapped
4- Channel morphology changes
5- Riparian/vegetative changes
6- Other: (specify) _____
7- Don't know

C-16 Has a baseline been established for metrics of interest?

1- Yes
2- No
3- Don't know

C-17 Where has the monitoring been conducted? (Please provide number of sites, areas, or stream length.)

C-18 How often have data been collected?

C-19 What is the time frame (duration) of the monitoring plan?

C-20 What results has the monitoring shown to date?

1- Inconclusive
2- Specific results observed (Brief description: _____)
3- Don't know

C-21 Were any changes in fish presence or local densities observed as a result of the project?

1- Yes [If YES, what changes?]
2- No
3- Don't know

For **Habitat** Projects Only (**H**)

[Note: These questions will be asked of project managers only if monitoring has occurred. We estimate that only about 20% of the projects include a monitoring element. Specific questions will be targeted for each of the six major habitat project categories.]

*For Habitat – **In-stream Passage** Only*

C-H2.1 Were surveys conducted of adults, redds, juveniles, and/or fry upstream of the barrier after implementation?

1- Yes (specify – check all the apply: adults, redds, juveniles, fry)
2- No
3- Don't know

C-H2.2 If yes, what methods used?

1- Electrofishing
2- Seining
3- Snorkeling
4- Observation
5- Other
6- Don't know

C-H2.3 Were upstream-downstream comparisons made?

1- Yes
2- No
3- Don't know

C-H2.4 Were changes noted upstream, downstream, or both? [check all that apply]

1- Upstream
2- Downstream
3- Don't know

C-H2.5 Did removing the barrier open up spawning/rearing habitat upstream?

1- Yes [If YES, did removing the barrier provide better quality spawning/rearing habitat upstream than was available downstream? Yes / No / Don't know]
2- No
3- Don't know

C-H2.6 Have you noted the flow range over which fish passage is now afforded?

1- Yes [If YES, how do the results compare with the design specifications?]
2- No
3- Don't know

*For Habitat – **Riparian Habitat** Only*

C-H3.1 What were the primary purposes of the project?

1- In-stream shading
2- Large woody debris (LWD) recruitment
3- Bank stability
4- Spawning/rearing habitat protection
5- Increase organic/insect inputs
6- Other: (specify) _____

C-H3.2 What type of plantings were used?

1- Seeds
2- Seedlings
3- Willow stakes (watlings)
4- Container plants
5- Mature plants
6- Other: (specify) _____

C-H3.3 What percent of plantings survived the first year? ___ The second year? ___

C-H3.4 Were additional plantings necessary?

1- Yes
2- No
3- Don't know

C-H3.5 Were temporary erosion control measures necessary?

1- Yes
2- No
3- Don't know

*For Habitat – **In-stream Diversion** Only*

C-H4.1 Was there a reduction in water diverted as a result of the project?

1- Yes
2- No
3- Don't know
4- Not applicable

C-H4.2 How effective is the screen in preventing fish from entering ditch?

1- 100%
2- More than 75%
3- 25% to 75%
4- Less than 25%
5- Not applicable

C-H4.3 How long do fish take to return to channel from screen location?

C-H4.4 About how much annual O&M costs are being incurred?

C-H4.5 Are there site-specific features of the design that could be improved?

1- Yes [If YES, specify: _____]
2- No
3- Don't know

*For Habitat – **In-stream Habitat** Only*

C-H5.1 What was the primary purpose of project?

1- Habitat creation
2- Bank protection
3- Sediment transport modification
4- Other: (specify) _____

C-H5.2 If spawning gravel-related:

a. Why was gravel in short supply initially? (Natural geology; removal of in-stream wood/downcutting; dam upstream; gravel mining upstream/locally; increased

frequency/duration of peak flows; streambank hardening; other modification of upstream sources)
b. How much gravel was added? Cubic yards? Square Feet?
c. How much has remained within reach and provides habitat?
d. Has gravel shifted around in the reach?
e. Was scour and fill measured? How? (scour monitors; cross-section survey; topographic survey; visual observation)
f. Does more gravel need to be added? What fraction of original amount?
g. How many spawning seasons between implementation and first use by fish? (0 = first fall/winter/spring (i.e., within a few months usually) after implementation, 1 = second fall/winter/spring (following year), etc.)
h. (If applicable) Has use increased in successive seasons?
i. Has use been redirected from other spawning locations?
j. Have fry been observed? Have numbers been quantified?
k. Has there been any siltation of placed gravels that might be considered excessive?

C-H5.3 If bank erosion-related:

a. Intended to protect spawning or rearing habitat downstream?
b. Was treatment location a primary/significant or secondary/cumulative source of fine sediments?
c. Has bank erosion begun in nearby, non-treated location?

C-H5.4 If adult holding habitat creation-related:

a. Was habitat in short supply initially?
b. Was initial existing habitat associated with risks? Poaching; over-crowding; too far from spawning habitat; poor water quality (temperature)
c. Have adults been redistributed successfully?
d. Was there an increase in numbers of redds in reach associated project?

C-H5.5 If juvenile rearing habitat creation-related:

a. Was habitat in short supply initially?
b. Was predation an issue? How much?
c. Has juvenile use been observed? If yes:
    i. Have densities increased overall? Or,
    ii. Have juveniles mostly redistributed from poorer quality habitat to the new habitat

*For Habitat – **Upland Habitat** Only*

C-H6.1 What was primary purpose of upland habitat modification?

1- Fine sediment abatement
2- Wetland creation/enhancement/restoration
3- Stream shading
4- Large woody debris (LWD) recruitment source
5- Creation/enhancement/restoration
6- Stormwater runoff control
7- Other: (specify) _____

C-H6.2 If fine sediment abatement-related:

a. Intended to protect spawning or rearing habitat downstream?
b. Intended to control primary/significant or secondary/cumulative source of fine sediments?
c. Have other sediment sources become important since project completion?
d. (If applicable) Have re-vegetation measures worked? How well?

*For Habitat – **Estuarine/Marine Nearshore** Only*

C-H7.1 What was the primary habitat of interest?

1- Intertidal beach
2- Intertidal mudflat
3- Feeder bluff/longshore transport
4- Macroalgae
5- Eel grass
6- Emergent marsh
7- Rocky shore
8- Nearshore riparian
9- Intertidal channels
10- Estuary
11- Other: (specify) _____

C-H7.2 Was monitoring conducted prior to project construction?

1- Yes
2- No

C-H7.3 [If YES in C-H7.2] What monitoring methods were used?

1- Fish sampling (e.g., beach, purse seine, trawl net, trapping)
2- Visual observation (e.g., diving, bird census)
3- Plant density/survival sampling
4- Epibenthic sampling (e.g., core sampling)
5- Infauna sampling (e.g., core sampling)
6- Ground survey (e.g., beach surface cross-sectional elevation profile)
7- Community composition sampling (e.g., using community indices).
8- Other: (specify) _____

C-H7.4 What were the primary goals for habitat functions?

1- Salmonid prey production (from upland, marsh, or mud)
2- Fish access to intertidal areas (for feeding, spawning, or refuge)
3- Riparian functions (e.g., shading/organic inputs)
4- Stable substrate (e.g., beach composition for forage fish spawning)
5- Submerged vegetation structure (e.g., algal/eel grass nearshore subtidal foraging/refuge)
6- Emergent vegetation structure (e.g., emergent marsh organic inputs/refuge)

C-H7.5 What monitoring methods were used to evaluate progress towards those goals?

1- Fish sampling (e.g., beach, purse seine, trawl net, trapping)
2- Visual observation (e.g., diving, bird census)
3- Plant density/survival sampling
4- Epibenthic sampling (e.g., core sampling)
5- Infauna sampling (e.g., core sampling)
6- Ground survey (e.g., beach surface cross-sectional elevation profile)
7- Community composition sampling (e.g., using community indices).
8- Other: (specify) _____

C-H7.6 What were the target organisms of interest?

1- Salmonids
2- Forage fish (e.g., herring, sand lance, surf smelt)
3- Mixed fish community
4- Birds
5- Epibenthic or benthic invertebrates
6- Demersal fish
7- Shellfish
8- Other: (specify) _____

C-H7.7 What was the primary restoration technique used?

1- Beach nourishment
2- Bulkhead removal
3- Dike breaching/removal
4- Eel grass bed reestablishment
5- Kelp forest reestablishment
6- Landfill removal
7- Plant removal/control
8- Riparian plant installation
9- Shoreline restoration
10- Tidal channel reconstruction
11- Tide gate removal
12- Other: (specify) _____

D. Overall Project Feedback

D-1 In your opinion, how successful was the project?

D-2 [Not for Planning/Assessments] How would you characterize the quality of the habitat that the project protected or restored?

1- Poor
2- Fair
3- Good
4- Excellent

D-3 [If NO to C-1] How closely were the project's design specifications met? (e.g., did the trees live, woody debris or gravel remain in place, new erosion occur?) **How do you know? How did you determine whether the project was successful?**

D-4 Did the work product meet your expectations?

1- Yes [If YES, how so?]
2- No [If NO, why not?]

D-5 What elements of the project were particularly successful? [This question refers especially to physical elements such as planting techniques]

D-6 What were the keys to success? [This question refers more to other factors such as volunteers, a well-coordinated team, or a good contractor.]

D-7 What difficulties did you encounter in design and implementation of the project?

D-8 What lessons did you learn from the project that would be helpful to future project applicants?

D-9 Do you have any final comments that you would like to share with the SRF Board?

Thank you very much for your time and willingness to participate in this survey. We greatly appreciate your help.